

## CLAIMS

1. An image creation device, comprising:

means for storing input images A, C of an object captured optically at least twice using different background images (G1, G2);

means for solving X and D in the system of equations

$$A = G1 + (X - G1)D$$

$$C = G2 + (X - G2)D$$

wherein X is a color or monochrome image of the object and D is the opacity thereof;

and

means for storing the obtained (X,D) as an image of the object.

2. The image creation device of claim 1, wherein said object is yarn, and the obtained (X,D) is stored as a yarn image.

3. The image creation device of claim 1, wherein said object is a textile product other than yarn, and the obtained (X,D) is stored as a textile product image.

4. The image creation device of claim 1, further comprising means for changing the value of D so that, when the possible value of D ranges from 0 to 1, the value of D is set to D=0 when equal to or smaller than a first predetermined value, to D=1 when equal to or greater than a second predetermined value, and to 0 to 1 when the value of D is between the first predetermined value and the second predetermined value.

5. The image creation device of claim 1, further comprising means for inputting a new background image F, and means for obtaining a composite image K from  $K=XD+F(1-D)$ .

6. An image creation method, comprising the steps of:  
obtaining input images A, C by optically capturing the image of an object at least twice using different background images (G1, G2);  
solving X and D in the system of equations

$$A=G1+(X-G1)D$$

$$C=G2+(X-G2)D$$

wherein X is a color or monochrome image of the object and D is the opacity thereof;  
and

storing the obtained (X,D) as an image of the object.

7. The image creation method of claim 6, wherein said object is yarn, and the obtained (X,D) is stored as a yarn image.

8. The image creation method of claim 7, wherein said object is a textile product other than yarn, and the obtained (X,D) is stored as a textile product image.

9. The image creation method of claim 6, further comprising the step of changing the value of D so that, when the possible value of D ranges from 0 to 1, the value of D is set to D=0 when equal to or smaller than a first predetermined value, to D=1 when equal to or greater than a second predetermined value, and to 0 to 1 when the value of D is between the first predetermined value and the second predetermined value.

10. An image creation program, comprising:

an instruction for storing input images A, C of an object captured optically at least twice using different background images (G1, G2);

an instruction for solving X and D in the system of equations

$$A = G1 + (X - G1)D$$
$$C = G2 + (X - G2)D$$

wherein X is a color or monochrome image of the object and D is the opacity thereof; and

an instruction for storing the obtained (X,D) as an image of the object.

11. The image creation program of claim 10, wherein said object is yarn, and the obtained (X,D) is stored as a yarn image in the instruction for storing.

12. The image creation program of claim 10, wherein said object is a textile product other than yarn, and the obtained (X,D) is stored as a textile product image in the instruction for storing.

13. The image creation program of claim 10, further comprising an instruction for changing the value of D so that, when the possible value of D ranges from 0 to 1, the value of D is set to D=0 when equal to or smaller than a first predetermined value, to D=1 when equal to or greater than a second predetermined value, and to 0 to 1 when the value of D is between the first predetermined value and the second predetermined value.